

REMARKS

Applicants thank the Examiner for the thorough examination given the present application. Claims 1-10 are now present in the application. Claims 1, 4, 9 and 10 are independent.

The Office Action dated April 18, 2008 has been received and carefully reviewed. Each issue raised in the Office Action is addressed below. Reconsideration and allowance of the pending claims are respectfully requested in view of the following remarks.

Request for Interview

In accordance with *MPEP* § 713.01, Applicants concurrently file herewith Form PTOL - 413A, "Applicant Initiated Interview Request", so as to permit applicant's representative along with the Examiner and the Primary Examiner in charge of this application to discuss and clarify the specific issues present in this application. The Examiner in accord with the *MPEP* is requested to defer taking any further action on this amendment in this application so as to expedite reaching a favorable conclusion, including but not limited to adopting suggestions that the Examiner and Supervisor may have as to claim language and/or arguments. **Applicant's representative will initiate a telephone request to schedule the interview, but in the event that this amendment reaches the Examiner before such a telephone request, the Examiner is respectfully requested to telephone Applicants' representative at the telephone number listed below to schedule the interview before acting on the Amendment.**

Claim Rejections – 35 U.S.C. § 103

Claims 1-9 now stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hatano in view of Miyazaki. Applicants submit the Examiner has failed to establish *prima facie* obviousness and respectfully traverse the rejection. A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the cited references must teach or suggest each and every element in the claims. See *M.P.E.P.* § 706.02(j); *M.P.E.P.* 2141-2144.

Independent claim 1 now specifies, *inter alia*, that there is at least one controller for controlling gas supply to supply a first gas to the process chamber through a first supply tube between the at least one controller and the process chamber, and, alternately, for supplying a second gas to the process chamber through a second supply tube between the at least one controller and the process chamber independent of the first tube. Independent claim 4 now specifies, *inter alia*, that said two supply tubes are connected to said gas supply member at a location whose temperature is lower than the decomposition temperature of said at least one gas, and said two gases are alternately supplied by said controller into said processing chamber through said gas supply member, wherein said two supply tubes and said gas supply member are connected to each other in said processing chamber. Independent claim 9 now specifies, *inter alia*, at least one controller for supplying a first gas to the process chamber through a first supply tube between the at least one controller and the process chamber, and, alternately, for supplying a second gas to the process chamber through a second supply tube between the at least one controller and the process chamber independent of the first tube.

Responsive to the claims, the rejection has combined Hatano and Miyazaki in an attempt to provide the first and second supply tubes connected to the gas supply member and has argued that the Fig. 3 embodiment of Hatano is "capable of alternate supply gases through valves V21-V25, col. 15, lines 44-50" at the bottom of page 2 of the instant Office Action. It is respectfully submitted that Hatano merely teaches that cleaning gases may be sequentially supplied to the one and only inlet supply tube 220 (see column 15, lines 36-54), and that Hatano does not teach alternate supply of gases to two gas supply tubes. Hatano teaches the use of only one process gas in a CVD device. In an attempt to remedy this deficiency in Hatano the rejection turns to Miyazaki, which shows at 221, 222 and 30' and again at 321, 322 and 30, two supply tubes connected to a gas supply member. Miyazaki teaches the use of two process gases in a CVD device, but that they must be simultaneously mixed in the CVD chamber 10. In Miyazaki, the two gases must be simultaneously supplied, not supplied alternately as in the instant claims. See column 1, lines 44-61, column 4, lines 1-22 and column 6, lines 6-12. Note especially column 4, lines

16-22, make it clear that the gases must be “mixed” for the CVD process to work. They cannot mix if they are not supplied simultaneously. The device of Miyazaki will not work if the gases are supplied alternately as in the instant claims. It is submitted that even if Hatano and Miyazaki were combined in the manner of the instant rejection of claims 1-9, the result would clearly lack the required controller that performs the claimed alternate supply of gases.

For that reason, the instant claims have been amended so as positively require that any prior art rejection of the claims must address a controller that alternately supplies a first gas and a second gas. This language cannot properly be interpreted to mean “capable” of being supplied alternately, as in the prior rejection, because the claims now require alternate supply of the gases through the first and second supply tubes. Since the references, either taken alone or in combination, fail to teach or suggest all of the claim limitations, *prima facie* obviousness has not been established as to claims 1, 4 and 9. With regard to dependent claims 2, 3 and 5-8, Applicants submit that claims 2, 3 and 5-8 depend, either directly or indirectly, from independent claim 1 which is allowable for the reasons set forth above, and therefore claims 2, 3 and 5-8 are allowable based on their dependence from claim 1. Reconsideration and allowance thereof are respectfully requested.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hatano in view of Miyazaki and Raaijmakers. Responsive to the method claim, the rejection now purports to combine Raaijmakers with the other prior art to provide the suggestion for alternately supplying process gases. To the contrary, Raaijmakers is directed to processes of atomic layer deposition which by definition requires alternate supplying of process gases. Both Hatano and Miyazaki are directed to chemical vapor deposition where process gases must be simultaneously supplied. As Miyazaki makes clear, process gases must be simultaneously supplied so that they will combine in the location of the reaction chamber, and any attempt to supply them alternately would destroy both Hatano and Miyazaki for their intended purposes. Accordingly, it is respectfully submitted that Raaijmakers cannot be combined with the other applied prior art and therefore cannot remedy the defects noted above with respect to that combination. Reconsideration and allowance thereof are respectfully requested.

The above amendments and remarks have been presented in an effort to bring the prosecution to a prompt and reasonable conclusion. Should the Examiner have suggestions that would assist that process, Applicants would appreciate any such suggestions as the Examiner may have.

Conclusion

All objections and rejections raised in the Office Action having been properly traversed and addressed, it is respectfully submitted that the present application is in condition for allowance. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Notice of same is earnestly solicited.

Prompt and favorable consideration of this Amendment is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Paul T. Sewell, Registration No. 61,784, at (703) 205-8000, in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: July 16, 2008

Respectfully submitted,

By: 

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